

Notice of Allowability

Application No.

10/710,734

Applicant(s)

ENGEL ET AL.

Examiner

Naum B. Levin

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/30/2004 Response.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing-Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


VUTHE SIEK
PRIMARY EXAMINER

DETAILED ACTION

1. This office action is in response to application 10/710,734 filed on 07/30/2004. Claims 1-7 remain pending in the application. Claims 8-20 are canceled by applicant and withdrawn from the further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claims.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-7 (Group 1), drawn to a method of adjusting process corners for adjusting timing of an integrated circuit design, said method comprising establishing initial voltage sensitivity curves relating to the relationship between gate timing variations caused by voltage supply changes and **gate timing variations caused by manufacturing processing changes in a circuit design for slow and fast process extremes**, classified in class 716, subclass 6.

II. Claims 8-20 (Group 2), drawn to a method of adjusting timing requirements of an integrated circuit design comprising establishing a circuit design having initial timing requirements and an initial voltage supply, classified in class 716, subclass 6.

Inventions 1-7 (Group 1) and 8-20 (Group 2) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed

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does not require the particulars of the subcombination as claimed, because Group 1 includes **slow and fast process extremes**. The subcombination has separate utility such as “establishing initial voltage sensitivity curves relating to the relationship between gate timing variations caused by voltage supply changes and **gate timing variations caused by manufacturing processing changes in a circuit design for slow and fast process extremes**”.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown above, restriction for examination purposes as indicated is proper.

During a telephone conversation with Attorney Richard Kotulak (Registration No. 27, 712) on 09/07/2006 a provisional election was made without traverse to prosecute the invention of group I, claims 1-7.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with Attorney Richard Kotulak (Registration No. 27, 712) on 09/18/2006.

4. The application has been amended as follows:

Cancel claims 8-20.

Allowable Subject Matter

5. Claims 1-7 are allowed over prior art of record.
6. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest or render obvious:

A method of adjusting process corners for adjusting timing of an integrated circuit design, said method comprising: establishing initial voltage sensitivity curves relating to the relationship between gate timing variations caused by manufacturing processing changes in a circuit design for slow and fast process extremes and changing an initial voltage supply to a revised voltage supply to accommodate a revised timing requirements based on where revised process corners cross revised voltage sensitivity curves.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naum B. Levin whose telephone number is 571-272-1898. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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